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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/733,907	12/12/2000	Yasuhito Tanaka	P64537US1	6075

136 7590 10/29/2004

JACOBSON HOLMAN PLLC  
400 SEVENTH STREET N.W.  
SUITE 600  
WASHINGTON, DC 20004

EXAMINER
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HO, HA DINH

ART UNIT	PAPER NUMBER
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3681

DATE MAILED: 10/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/733,907

Applicant(s)

TANAKA, YASUHIRO

Examiner

Ha D. Ho

Art Unit

3681



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 8/30/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5,6,8,10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5,6,8 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/102,557.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This Office Action is responsive to Applicant's Amendment filed on 8/30/04. Claims 5 and 10 have been amended accordingly. Claims 5, 6, 8, 10 and 11 are currently pending.

2. Claim 11 was withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper filed on 7/24/02.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5, 6, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zettner et al (US 5,617,937) in view of Deppert et al. (US 5,330,393) and Welter et al. (US 5,407,045).

Regarding claims 5 and 10, Zettner et al'937 teach a pulley unit (see Fig. 1) having a free end (i.e., the left side) and a base end (i.e., the right side), comprising:

inner (2) and outer (1) concentric ring bodies that define an annular space there between;  
a one-way clutch including a cam surface (13), a holder (4) defining a pocket (17), a roller (3), and an elastic member (18);

Art Unit: 3681

first and second roller bearings (6, 6) provided on both sides of the one-way clutch, one on the free-end side of the pulley unit (i.e., the left side) and another on the base end side of the pulley unit (i.e., the right side), wherein the first roller bearing is in form of a cylinder and in rolling contact with the outer surface of the inner ring body (2); and

a belt (see col. 2, lines 26-29) engaging the outer ring body at the free end side (the left side) in a region including the roller bearing (the left one) and the one-way-clutch (13, 4, 3, 18).

Zettner et al'937 do not show the second bearing being a ball bearing.

Using of a combination of a needle bearing and a ball bearing in a pulley unit is old and well known in the art. For example, Deppert et al'393 show a pulley unit (see Fig. 2) having inner (5) and outer (9) concentric ring bodies, a needle bearing (15) provided on the left side of the pulley (i.e., free-end side), and a ball bearing (11) provided on the right side of the pulley (i.e., base end side).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a combination of a needle bearing and a ball bearing instead of two needle bearings on the pulley unit of Zettner et al'937 in view of Deppert et al'393, since using of a combination of a needle bearing and a ball bearing in a pulley unit is old and well known in the art. Further, replacing a needle bearing by a ball bearing is to prevent the inner ring body from moving axially.

Zettner et al'937 do not show axial movement of the holder (4) of the one-way clutch being restricted by the inner ring (2).

Welter et al'045 show a locking element freewheel assembly (see Fig. 4) comprising inner and outer ring bodies (1, 2), a holder (6) for holding the rollers (5), wherein the inner ring

Art Unit: 3681

body (2) is provided an annular groove (13) so that the axial movement of the holder (6) is restricted.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Zettner et al'937 such that axial movement of the holder (4) of the one-way clutch is restricted by the inner ring (2) as taught by Welter et al'045 in order to provide the desired effects of a uniform contact loading between locking element and locking surface (col. 2, lines 13-21).

Regarding claim 6, wherein the left roller bearing is in rolling contact with the inner surface of the outer ring body.

Regarding claim 8, wherein the roller (3) is cylindrically shaped.

### ***Response to Arguments***

5. Applicant's arguments filed 8/30/04 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the offset load is applied by means of a hanging belt) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Note that the recitation of "*a region including the roller bearing and the one-way clutch*" recited in claims 5 and 10 does not necessarily exclude the region of the other bearing.

Applicant apparently argues that the belt engages the outer ring body in a region including **only** the roller bearing and the one-way clutch so that an offset load by the belt is applied to the pulley unit. Applicant is reminded that this feature is directed to a non-elected species, Figure 1, and an election was made **without** traverse in Paper filed on 7/24/02.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

### ***Communication***

7. Submission of your response by facsimile transmission is encouraged. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of

Art Unit: 3681

correspondence not permitted by facsimile transmission, see M.P.E.P. 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check. Responses submitted by facsimile transmission should include a Certificate of Transmission (M.P.E.P. 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to  
the Patent and Trademark Office on \_\_\_\_\_

(Date)

Typed or printed name of person signing this certificate:

\_\_\_\_\_

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and M.P.E.P. 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Examiner Ho whose telephone number is (703) 305-0738. The examiner can normally be reached on Monday-Friday from 7:30 A.M. to 5:00 P.M. Eastern Standard Time. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Mr. Charles Marmor, can be reached at (703) 308-0830. Any inquiry of a general nature or relating to the status of this application or proceeding should directed to the Group receptionist whose telephone number is (703) 308-2168.

HDH  
(703) 305-0738  
October 21, 2004

*Ha Ho*  
**HAHO**  
**PRIMARY EXAMINER**  
Art Unit 3681 10/21/04